TABLE OF CONTENTS

No. 1. January 1940

Spinal cord regeneration in rat. O. SUGAR and R. W. GERARD 1
Paleocerebellar inhibition of vasomotor and respiratory carotid sinus reflexes. GIUSEPPE MORUZZI 20
Brain potential changes in man during cyclopropane anesthesia. MORTON A. RUBIN and HARRY FREEMAN 33
Conditioned vestibular reactions. H. LÖWENBACH and W. HORSLEY GANTT 43
Modification of the cortical frequency spectrum by changes in CO_2, blood sugar and O_2. F. A. GIBBS, DENIS WILLIAMS and E. L. GIBBS 49
Ocular rotation in anesthesia and under the influence of supranuclear centers. ERNEST A. SPIEGEL and DEAN A. COLLINS 59
Effect of various cortical lesions on development of placing and hopping reactions in rats. CHANDLER MCCUSKEY BROOKS and MORDANT EMORY PECK 66
Activity of isocortex and hippocampus: Electrical studies with micro-electrodes. B. RENSHAW, A. FORBES and B. R. MORISON 74

No. 2. March 1940

Facilitation and difficilitation effected by nerve impulses in peripheral fibers. JOSEPH ERLANGER and EDGAR A. BLAIR 107
A human cortical area producing repetitive phenomena when stimulated. RICHARD M. BRICKNER 128
Effects of eserine, acetylcholine and atropine on the electrocorticogram. FREDERICK R. MILLER, G. W. STAVRAKY and G. A. WOONTON 131
Cord potentials in spinal shock—single volleys. WINIFRED B. STEWART, JOSEPH HUGHES and G. P. MCCOUCH 139
Cord potentials in spinal shock—multiple stimuli. JOSEPH HUGHES, G. P. MCCOUCH and WINIFRED B. STEWART 146
Cord potentials in spinal shock—crossed effects in monkey, *Macaca mulatta*. G. P. MCCOUCH, WINIFRED B. STEWART and JOSEPH HUGHES 151
An attempt to produce sleep by diencephalic stimulation. FRANK HARRISON 156
Relayed impulses in ascending branches of dorsal root fibers. JOHN B. HURSH 166
Observations upon diaphragmatic sensation. J. C. HINSEY and R. A. PHILLIPS 175
The phasic response to cortical stimulation. C. G. SMITH, F. A. METTLER and E. A. CULLER 182

No. 3. May 1940

Electric responses derived from the superior cervical ganglion with micro-electrodes. P. O. THERMAN, A. FORBES and R. GALAMBOS 191
Effect of cortical lesions on affective pupillary reactions. BORIS URY and ERIC OLDBERG 201
Postural reflexes and grasp phenomena in infants. B. L. PACELLA and S. E. BARRERA 213
Action of ether and nembutal on the nervous system. PETER HEINBECKER and S. HOWARD BARTLEY 219
Degeneration and regeneration of sympathetic synapses. WILLIAM C. GIBSON 237
Studies of motor performance after parietal ablations in monkeys. MARGARET A. KENNARD and M. M. KESSLER 248
Somatic and autonomic reflexes in spinal monkeys. A. L. SAHS and J. F. FULTON .. 258
Nerve activity accompanying fasciculation produced by prostigmin. RICHARD L. MASLAND and ROBERT S. WIGTON 269
Effects on respiration, blood pressure and gastric motility of stimulation of orbital surface of frontal lobe. PERCIVAL BAILEY and WILLIAM H. SWEET 276

No. 4. July 1940

J. G. Dusser de Barenne 1885–1940 283
Hypothalamic lesions and pneumonia in cats. E. W. HAERTIG and JULES MASSERMAN 293
Progression movements elicited by subthalamic stimulation. WILLIAM H. WALLER. 300
Electrical activity of the lateral geniculate of cats following optic nerve stimuli. GEORGE H. BISHOP and JAMES S. O'LEARY 308
Integration of locomotor behavior patterns of the hagfish. BERRY CAMPBELL 323
Effects of heating hypothalamus of dogs by diathermy. ALLAN HEMINGWAY, THEODORE RASMUSSEN, HOWARD WIKOFF and A. T. RASMUSSEN 329
Rôle of neocortex in regulating postural reactions of the opossum (*Didelphys virginiana*). REGINALD B. BROMILEY and CHANDLER McC. BROOKS 339
Chemical constitution and anesthetic potency in relation to cortical potentials. HENRY K. BEECHER 347
Ocular movements from the occipital lobe in the monkey. A. EARL WALKER and THOMAS A. WEAVER, JR. 353
Nature of the first visible contractions of the forelimb musculature in rat fetuses. WILLIAM L. STRAUS, JR. and GRAHAM WEDDELL 358

No. 5. September 1940

Activity in the simplest spinal reflex pathways. BIRDSEY RENSHAW 373
Influence of sensory systems on spontaneous activity of cerebral cortex. F. H. LEWY and GEORGE D. GAMMON 388
Choline esterase in brain and spinal cord of sheep embryos. D. NACHMANSOHN 396
Central course of "recurrent" sensory discharges. D. H. BARRON 403
Intercortical connections of corpus callosum as indicated by evoked potentials. HOWARD J. CURTIS 407
An analysis of cortical potentials mediated by the corpus callosum. HOWARD J. CURTIS 414
Function of mesencephalic root of fifth cranial nerve. KENDALL B. CORBIN and FRANK HARRISON 423
Oculomotor nerve and reflex dilatation of pupil. WILLIAM D. SEYBOLD and ROBERT M. MOORE 436
Movements elicited from precentral gyrus of adult chimpanzees by stimulation with sine wave currents. MARION HINES 442

No. 6. November 1940

Sensory cortex of chimpanzee. PERCIVAL BAILEY, J. G. DUSSER DE BARENNE, HUGH W. GAROL and W. S. MCCULLOCH 469
Units for sensory reception in cornea; with notes on nerve impulses from sclera, iris and lens. SARAH S. TOWER 486
Learning and other functions of the higher nervous centres of *Sepia*. F. K. SANDERS and J. Z. YOUNG 501
Conversion of phasic into tonic movements by pyramid lesions. FRED A. METTLER and C. METTLER 527
Forebrain and rage reactions. E. A. SPIEGEL, H. R. MILLER and M. J. OPPENHEIMER 538